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STATISTICAL REPORT OF SURVEYS <sup>#2</sup>  
ON  
SOUTHERN OREGON - NORTHERN CALIFORNIA

PINE BEETLE CONTROL PROJECT

DURING  
SEASONS 1921-1922-1923

U.S. Bureau of Entomology  
Forest Insect Field Station  
Klamath Falls, Ore.

January 1, 1924

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Assistant Entomologist.

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Preface.

While statistical tables and reports are laborious in preparation and very dry in perusal, they are nevertheless essential to an analysis and interpretation of the facts underlying the progress of insect epidemics and the results of control work. It is for this reason that the present statistical report has been prepared, to become the foundation for future surveys and a matter of record as to ~~the~~ progress of the pine beetle epidemic on the Southern Oregon-Northern California Project.

Data Included

The data included in this report were secured by extensive surveys conducted by the Bureau of Entomology throughout the project area between July 6th and August 31, of 1922 and June 6th to September 30 of 1923, together with a revision of the data secured during the cooperative survey of 1921 and presented in the statistical report by Mr. A.J.Jaenicke dated October 25, 1921.

A revision of the data secured in the survey of 1921 was made imperative, due to the establishing of a Zone of Infestation, the division of the project into three instead of five areas and the consequent change in the acreage and area involved. The present statistics are based on the same area and acreage for all three years and hence each years loss by areas and units are relative and can be compared.

#### Method of the Surveys

The method of insect surveys developed by the Bureau of Entomology, and explained in previous reports, were used throughout the work.

For the 1922 survey, a four-man crew, consisting of an estimator, one compassman and two spotters, was assigned to each of the three areas. In each unit a sample section was taken and intensively cruised and the insect killed trees of the past year's loss were blazed, numbered and tabulated. Strips were run by the estimator through the rest of the unit and a comparison of the various intensities of infestation made. In this manner insect killed trees were actually counted over 5% of the entire 1,276,000 acres, of the project.

During the 1923 season, the crews were reduced to three-man crews and all three men spent one day in estimating each unit, and another day or two in recrui-sing the check sections laid out the previous year. This method resulted in considerable saving of time and money and resulted in an actual count on almost 9% of the infested area.

By combining the results of the three years surveys together with the actual cruises made during the control operations, we now have very reliable data as to the acreage effected, the timber types, the topography, the acreage volumes of insect killed trees and the past and present insect losses for every square mile of the two thousand square miles involved in the project.

Personnell of Crews.

The surveys of 1922 and 1923 were carried out under the direction of the writer. The personnell of the crews was as follows:-

1922

Area 1-  
J.E.Patterson, Estimator.  
Ivan Houston, Compassman  
L.C.DeCarlow, Spotter  
A.J.Duffy, Spotter.

Area 2-  
F.P.Keen, Estimator.  
F.M.Bodenhamer, Compassman.  
O.J.Hauge, Spotter  
F.A.Zumbrunn, Spotter.

Area 3-  
H.A.Wise, Estimator  
Kenneth Perry, Compassman  
Patric Casey, Spotter  
C.L.Jones, Spotter.

1923

Area 1-  
W.J.Buckhorn, Spotter  
C.L.Jones, Compassman  
Harvey Abbey, Spotter.

Area 2-  
F.A.Zumbrunn, Spotter (part time)  
R.T.Manning, Spotter & Compassman.  
Ivan Houston, Compassman (part time)  
W.J. Groshong, Spotter.

Area 3-  
O.J.Hauge, Spotter.  
C.Zumbrunn, Spotter.  
H.A.Wise, Compassman.

Computations:-

The work of computing the data at the close of the 1922 survey devolved upon the estimators for each area, while the work of assembling the data into tables was largely the work of O.J.Hauge.



The computations for the 1923 survey together with the revision of all data to date, as contained in the following tables was done by the writer.

### EXPLANATION OF TABLES

#### Part I : General Tables

In Part I has been placed all of the tables such as, acreage, ownership, and timber volumes which are fairly constant for all years.

#### The Project Area

The Project area has been changed somewhat from that covered in the first reports. It now includes just the territory within the Zone of Infestation as established by the Oregon State Forester and that portion of California included in the boundaries defined by the Board of Control as shown on the various maps.

Instead of five areas designated in the earlier reports, the project area under the terms of the cooperative agreement is now divided into three areas as follows:-

Area 1- That portion of the project area, lying west of Klamath Lake including a small portion below the Klamath River in Northern California.

Area 2- That portion of the Klamath Indian Reservation lying south of the Sprague and Sycan Rivers, and the private lands south of the Reservation, including the Gerber and Goodlows Units (formerly in Area 3).

Area 3- The eastern portion of the project including the area within and adjacent to the Fremont and Modoc National Forests.

Division into Units

In a good many cases the units as first defined have been changed, so that each unit as far as possible would represent an entomological sub-division, or a tract containing approximately 30,000 acres with a well defined center of infestation which could be treated without reference to the rest of the area, or divided from the rest of the area by some topographical feature such as a high ridge, change in type, a valley or open stretch of country. For the purpose of comparison it is essential that these unit boundaries be kept the same throughout subsequent surveys and discussions of the project area.

Tables 1, 4, 7, and 10- Timbered Acreage By Ownership

The data contained in these tables was secured from the ownership records compiled by the Board from federal and county land records, together with the data obtained from the various surveys as to the boundaries and location of the timbered acreage.

It is not possible to have this acreage check with the computations of acreage kept by the Board. The latter is constantly changing due to changes in membership of the Association, owners who desire to do their own work and eliminations which the Board makes for administrative purposes. The timbered acreage as given in this table represents that which would ordinarily be considered as the "field" acreage and for entomological purposes the unit totals will be considered constant.

Table 2,5,8. & 11 - Timbered Acreage by Character of Stand

The figures in these tables were secured by tabulating the area, section by section, according to the types recognized and platted in the field surveys. "Sparse yellow pine" includes the type recognized as scattered yellow pine, probably averaging not more than 2,000 board feet per acre. It also includes cut over lands.

The "Non- yellow" pine class includes fir and lodgepole areas carrying no yellow pine. It has been found that the infestation varies a great deal with the type, the pure yellow pine carrying the preponderance of the infestation. Therefore in control operations this type with a small amount of work in the adjacent sparse and mixed stands is the only type that need be considered on this project.

Tables 3,6,9. & 12- Yellow Pine Volumes by Ownership

Yellow pine volumes were computed section by section, using the type data for the surveys and the best information available as to average stands per acre. The totals can only be considered as the best approximation that it is possible to make without resorting to a timber reconnaissance. It will be noted that the total stand on the project is over twelve billion feet or approximately 16% of the total yellow pine stand in Oregon.

Part II- Distribution of Beetle Losses of 1921.

In order to show the distribution of the yellow pine beetle losses for 1921 throughout the project, these losses were tabulated by areas, units and subdivided according to timber types and ownership.

Killed	Unit	Killed 1924
<del>1924</del> 2,553	Johnson Prairie	6,450, 000
2,930	Bly	4,485, 000
180	Butler	650, 000
791	Goodhue	1,200, 000
1,640	Davis Valley	2,700, 000
2,870	Dry Lake	2,000, 000
1,840	Fossil Mile	1,430, 000
1,904	Hay Creek	900, 000
738	Monterey Co.	1,620, 000
1,116	Scab Creek	3,000, 000
2,574	Sycan	23,525
<u>18,138</u>		<u>6,030</u>
1923		29,555
2,940		
1,870		
315		
560		
1,520		16,583
1,850		
1,300		
855		
1,800		
<u>810</u>		
17,820		
<u>21,763</u>		16,583



Tables 13,17,21. & 25- Trees Killed and Volume of 1921 Loss,According to Type of Stand.

These tables were computed by tabulating the losses for each type section by section.

Table #25 shows that for this project as a whole 72% of the infestation was found in the pure yellow pine stands, 15% in the sparse yellow pine type and 13% in the mixed fir type.

Tables 14,18,22. and 26- Number of Yellow Pine Trees Killed by Beetles in 1921 by Ownership.

These tables give the distribution of the losses for each area by units and by owners. Table #26 shows that 40% of the 1921 loss was on government land and 56% on state and private lands.

Tables 15,19,23 and 27 give the distribution of the volume of loss by owners.

Tables 16,20,24 and 28 give the same distribution of values according to the ownership. Table 28 shows that of the value of damage, for the 1921 infestation, the government sustained 41% and the private and state sustained 59%.

These computations required a tremendous amount of time and labor. It was decided not to make similiar computations for the 1923 losses as the value from the entomological standpoint is very small.

The division of the losses by owners is of most interest from an administrative standpoint. It might be said that similiar distribution of the 1922 loss would not be in exactly the same ratio as the distribution of the 1921 loss. For instance, the reduction which occurred in 1922 would be found to be largely in the yellow pine type,

and the losses in the sparse stand and mixed fir would remain about the same. And again, on Area 1 and 3 the reduction by ownership would be proportionately greater on the private lands than on the government lands, while on Area 2 the reverse would probably be true.

SUMMARY OF STATISTICS FOR 1920, 1921, AND 1922.

Part III -

The tables in this part comprise all of the tables of interest from an entomological standpoint showing the essential facts as to the yearly losses by areas and by units.

Tables 29, 30, 31, and 32- Revised Losses for 1920

As has been stated, in order to make the losses for the three years comparable, the figures for the 1920 loss as given in previous reports was revised so as to apply to the new project area and new unit boundaries.

The figure for the number of trees killed was reduced from 134,868 as shown in the "Statistical Report of Oct. 25, 1921" to 133,000 through the elimination of some acreage previously included.

With a great mass of additional data as to the average volume of the trees killed, new average volumes, as shown in the tables, were used to arrive at the total board feet killed.

This caused an increase in the volume figure for the 1920 loss from 117,220,000 to 123,410,500 board feet.

In computing volumes, the Forest Service volume table Form 874qq Scribner Decimal C, was used. This table which applies to California Sierra conditions has been found the most suitable for the timber in this locality and has been used for all tabulations on the project, both survey and control work.

The average value of the stumpage used in the first report was \$3.00 per M.B.M. In the revised tables instead of using this general average for the entire project, different stumpage values were used for the various units depending upon the accessibility and other factors which influence timber values. These new values have been checked by the best local authorities on the subject and are believed to be more indicative of the different values at stake in the various parts of the project, than the former figures. This change caused an increase in the loss figure from \$351,660 to \$353,628 for the entire project although the average value per M.B.M. was only increased from \$3.00 per M.B.M. to \$3.03 M.B.M.

Because of the various proportions/<sup>of</sup> scattered timber stands and mixed fir type, the average number of trees killed per section is not always indicative of the intensity of the infestation. Therefore, in tables computing both the average and maximum number of trees killed per section is given, as well as the percent of the yellow pine stand killed.



Table 33,34,35 and 36 - Summary of Yellow Pine Losses For 1921

In these tables is summarized the loss figures for 1921 as shown by the survey of 1922 and given in detail in Part III.

New average volumes were used based on accumulated data as to the size of trees killed in 1921. There was also an increase in stumpage values. Therefore, while there was a decrease in the number of trees killed, the volume of the loss for 1921 remained almost the same as for 1920 and the value of the damage increased to \$416,972.

Tables 37,38,39, and 40 - Summary of Yellow Pine Losses for 1922.

Control was inaugurated in the spring of 1922 and directed against the loss of 1921 on a few units. Therefore the loss of 1922 which followed is the first loss which could show a reduction as the result of control. This reduction is very apparent, particularly in the units treated.

From the quantity of records secured in 1923 it was apparent that there had again been an increase in the average volume of the trees killed. These new averages were therefore used in computing the 1922 losses.

Due to the natural increase in stumpage values and an increase in values as a result of the inauguration of control work and the confidence which it created in the minds of owners and speculators that the pine beetle menace would be controled, these values have been increased to a fair market stumpage value as it exists today. This value ranges from \$2.00 to \$6.00 per M.B.M. depending upon the merchantibility quality and accesibility of the timber in question.



PROGRESS OF CONTROL WORK

Part IV-

In order to make the present computations of tables more complete and useful , the additional tables giving the progress of the control work have been inserted. The data presented in these tables has appeared in the progress reports issued previously, but here are arranged according to the treatment by units. In this way a better analysis can be made of the amount of work carried on in each unit and the results of control for each unit as indicated by the survey figures.

Three tables are presented grouping work according to the generation of beetles destroyed in the control operations. These tables include all work accomplished up to July 1, 1923. The spring work of 1922 against the overwintering generation of 1921 as given in Table 41 is the only work which could have influenced the 1922 infestation as shown by the last survey. The results of the control work shown in Tables 42 and 44 will not be evident until the survey of 1924 has been completed.

CONCLUSION:-

Since this report is merely statistical and a foundation for later reports no attempt will be made to comment upon the various points brought out by the tables.

It is the writer's plan to subsequently issue two other reports; the first giving the history and analysis of the epidemic and control work chronologically for each of the forty six units and the second a technical paper covering the various entomological points upon which the project so far has thrown considerable light.

*F. P. Keen*

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F. P. Keen

Assistant Entomologist.

Klamath Falls, Ore.

January 25, 1924.

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PART I

GENERAL TABLES

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TABLE NO.1  
AREA 1  
TIMBERED ACREAGE BY OWNERSHIP

Unit Name	: Crater	: Klamath	: O. & C.	: Vacant	: State	: Private	: Totals
	: N.F.	: N.F.				: Assoc. : Invol.:	
Aspen Lake	640					16,040 270	16,950
Big Bend			2,910			3,860 550	7,320
Chase Butte			2,320	120		6,450 2,630	11,520
Clover Sta.	5,250		5,300	80		39,000 2,280	51,910
Eagle Ridge				320		16,420 1,180	17,920
Jenny Creek	640		15,780	1,600		19,550 8,110	45,680
Johnson Prairie	1,950		13,120	360		30,840 1,810	48,080
Klamath Canyon		350	3,900	2,500		1,370 3,140	11,260
Pokegama		520	7,120	1,570		37,070 2,920	49,200
Round Lake					120	14,640 3,590	18,350
Topsy		560	7,270	480	320	6,510 10,280	25,420
Worden			240	80		4,070 3,100	7,490
Totals	8,480	1,430	57,960	7,110	440	195,820 39,860	311,100



TABLE NO.2  
AREA NO.1  
TIMBERED ACREAGE BY CHARACTER OF STAND

Name of Unit	: Sparse : Yellow Pine	: Pure : Yellow Pine	: Mixed : Fir Type	: Non-Yellow : Pine Type	: Totals :
Aspen Lake		13,590	3,120	240	16,950
Big Bend	450	3,390	3,360	120	7,320
Chase Butte	3,190	2,500	5,270	560	11,520
Clover Sta.		27,950	14,670	9,290	51,910
Eagle Ridge	680	12,170	4,290	780	17,920
Jenny Creek	520	24,320	15,780	5,060	45,680
Johnson Prairie		20,900	18,790	8,390	48,080
Klamath Canyon	2,060	9,000	40	160	11,260
Pokegama	3,480	25,940	16,130	3,650	49,200
Round Lake	2,790	13,090	2,470		18,350
Topsy	9,030	10,880	5,390	120	25,420
Worden	3,570	1,560	2,260	100	7,490
Totals	25,770	165,290	91,570	28,470	311,100

TABLE NO.3  
AREA 1  
YELLOW PINE VOLUMES BY OWNERSHIP

Name of Unit	M.B.M.						Private		Totals
	Crater : N.F.	Klamath : N.F.	O.& C. :	Vacant :	State :		Assoc.	Invol.	
Open Lake	7,800						261,000	4,200	273,000
g Bend			26,800		<del>900</del>	<del>35,000</del> <del>34,100</del>		7,200	69,000
ase Butte			16,300	3,800		67,700		41,300	129,100
over Sta.	78,100		53,000			543,600		21,400	696,100
gle Ridge				1,900		183,000		9,300	194,200
enny Creek	6,000		62,500	<del>7,400</del> <del>73,500</del>		<del>221,400</del> <del>155,300</del>		77,700	375,000
hnson Prairie	15,300		103,800			469,200		18,400	606,700
amath Canyon		2,800	16,700	14,700		10,000		14,900	59,100
kegma		3,700	129,300	17,700		629,300		8,900	788,900
und Lake					1,300	175,400		46,000	222,700
psy		3,400	83,400	3,900	1,900	77,300		82,500	252,400
rden			1,800	200		36,100		25,800	63,900
tals	107,200	9,900	493,600	<del>115,700</del> 49,600	<del>4,100</del> 3,200	<del>2,642,000</del> 2,709,000		357,600	3,730,100

TABLE NO.4

AREA #TIMBERED ACREAGE BY OWNERSHIP

Name of Unit	K.I.R.	Fremont N.F.	Vacant	State	Private		Totals
					Assoc.	Invol.	
lgoma			1,070		5,220	2,310	8,600
ntelope	12,530		2,120		8,820	1,510	24,980
lack Hills	36,990				160	240	37,390
ly	24,920				2,400	650	27,970
hiloquin	21,210					400	21,610
erguson	11,320						11,320
erber			3,030		1,780	890	5,700
oodlowe		4,870	2,400		2,720	2,310	12,300
ildebrand			3,280		3,730	10,020	17,030
ock Canyon			1,760	1,080	5,850	3,500	12,190
ogston			1,000	920	5,530	4,680	12,130
addle Mt.	38,020				550	830	39,400
honer			1,240		2,040	9,090	12,370
prague	4,590				160	620	5,370
quaw Flat			1,170	120	11,280	3,110	15,680
van			1,000		9,470	4,200	14,670
ycan	39,970				160		40,130
roust Cr.	30,630				320	3,340	34,290
hiskey Cr.	19,110		440	1,200	2,870	1,540	25,160
illow Flat			9,510		16,100	7,030	32,640
ainax	13,630				1,520	560	15,710
Totals	252,920	4,870	28,020	3,320	80,680	56,830	426,640

TABLE NO.5

## AREA 2

## TIMBERED ACREAGE BY CHARACTER OF STAND

Name of Unit	M.B.M.				Totals	Sec.
	: Sparse : Yellow Pine	: Pure : Yellow Pine	: Mixed : Fir Type	: Non- : Yellow Pine:		
Algoma	6,080	2,030	490		8,600	13.4
Antelope	1,620	13,620	8,890	850	24,980	39.0
Black Hills	8,320	18,830	8,600	1,640	37,390	58.4
Bly	5,850	15,920	5,840	360	27,970	43.7
Chiloquin	1,350	9,730	9,640	890	21,610	33.8
Ferguson	8,300	2,900	120		11,320	17.7
Gerber	2,680	3,020			5,700	8.9
Goodlowe	4,000	7,580	720		12,300	19.2
Hildebrand	7,960	7,870	1,200		17,030	26.6
Rock Canyon	2,630	7,470	1,600	490	12,190	19.0
Royston	660	9,430	2,000	40	12,130	19.0
Saddle Mt.	6,540	15,980	14,480	2,400	39,400	61.5
Shoner	7,810	4,240	320		12,370	19.3
Sprague	80	4,110	1,180		5,370	8.4
Squaw Flat	3,390	7,690	3,500	1,100	15,680	24.5
Swan	5,670	7,080	1,920		14,670	22.9
Sycan	9,670	18,500	5,220	6,740	40,130	62.6
Trout Cr.	3,900	18,230	7,700	4,460	34,290	53.6
Whiskey Cr.	2,090	15,700	6,730	640	25,160	39.2
Willow Flat	8,820	22,220	1,600		32,640	51.0
Yainax	2,350	11,140	2,160	60	15,710	24.6
Totals	99,770	223,290	83,910	19,670	426,640	66.5



TABLE NO.6  
AREA 2  
YELLOW PINE VOLUMES BY OWNERSHIP  
M.B.M.

Name of Unit:	K.I.R.	Fremont N.P.	Vacant	State	Private		Total	Total
					Assoc.	Invol.		
Algoma			2,800		28,200	12,400	40,600	43,400
Antelope	210,500		26,000		76,700	12,700	89,400	325,900
Black Hills	525,900				1,500	3,000	4,500	530,400
Bly	242,100				8,800	12,700	21,500	263,600
Chiloquin	216,700					2,700	2,700	219,400
Ferguson	111,900							111,900
Gerber			16,100		10,800	3,400	14,200	30,300
Goodlowe		29,600	14,800		18,200	12,700	30,900	75,300
Hildebrand			31,500		41,000	98,600	139,600	171,200
Rock Canyon			23,200	12,000	75,700	43,600	119,300	154,500
Royston			14,100	13,100	78,800	65,100	143,900	171,100
Saddle Mt.	388,600				3,300	5,600	8,900	397,500
Shoner			11,800		19,500	73,800	93,300	105,100
Sprague	53,900				1,100	6,100	7,200	61,100
Squaw Flat			12,300	600	127,800	33,000	160,800	173,700
Swan			7,100		96,100	40,800	136,900	144,000
Sycan	559,300				2,300		2,300	561,600
Trout Cr.	321,800				2,300	35,000	37,300	359,100
Whiskey Cr.	234,200		5,400	13,500	38,300	18,800	57,000	310,100
Willow Flat			79,200		228,000	80,000	308,000	387,200
Yainax	169,400				15,600	3,700	19,300	188,700
Totals	3,034,300	29,600	244,400	39,200	873,900	563,700	1,437,600	4,785,100

TABLE NO.7

## AREA 3

## TIMBERED ACREAGE BY OWNERSHIP

Name of Unit	Modoc N.F.	Fremont N.F.	Vacant	State	Private		Totals
					Assoc.	Invel.	
Shoshone Valley		25,430	8,980		3,000	6,190	43,600
Powder Flat	56,280		460		22,460	11,800	91,000
Shoshone Creek		12,000	5,810		9,370	6,020	33,200
Shoshone Lake		42,070	1,360	120	1,950	7,600	53,100
Shoshone Mile	12,640	16,280	1,070	320	1,030	7,210	38,600
Shoshone Creek		16,020	120		1,600	1,360	19,100
Shoshone		6,680	14,020		14,860	4,740	40,300
Shoshone		6,510	1,390	50	12,710	1,140	21,800
Shoshone		9,470	8,350		38,840	6,640	63,300
Shoshone		11,490	2,470		20,120	4,220	38,300
Shoshone		2,860	920		26,700	3,120	33,600
Shoshone			15,130		1,260	3,210	19,600
Shoshone		17,520	1,130		12,990	2,560	34,200
Totals	68,920	166,330	61,310	490	166,940	65,810	529,700

TABLE NO. 6

## AREA 3

## TIMBERED ACREAGE BY CHARACTER OF STAND

Name of Unit	Sparse Yellow Pine	Pure Yellow Pine	Mixed Fir Type	Non Yellow Pine	Totals	Secs.
Barnes Valley	23,070	18,080	2,500		43,600	68.0
Crowder Flat	35,490	55,510			91,000	142.2
Deming Creek	7,880	16,820	5,730	2,770	33,200	51.8
Dog Lake	21,760	30,620	720		53,100	83.0
Four Mile	9,120	29,480			38,600	60.3
Hay Creek	8,210	9,280	1,610		19,100	29.8
Horsefly	19,870	18,270	2,160		40,300	62.8
Merritt Cr.	2,790	6,640	8,170	4,200	21,800	34.1
Meryl Creek	9,650	23,520	17,640	12,490	63,300	98.8
Owens	11,030	21,730	5,540		38,300	59.8
Quartz Valley	1,690	21,810	9,180	920	33,600	52.5
Seab Rock	16,230	3,370			19,600	30.6
Whitworth	3,070	10,060	17,780	3,270	34,200	53.4
Totals	169,860	265,160	71,020	23,650	529,700	82.8

**TABLE NO. 9**  
**AREA 3**

**YELLOW PINE VOLUME BY OWNERSHIP**

Name of Unit :	Modoc	Fremont	Vacant	State	Private		Totals	Totals
	N.F.	N.F.			Assoc.	Invol.		
Barney Valley		206,900	69,200		23,800	37,700	61,500	337,600
Crowder Flat	525,800		3,600		269,200	77,700	346,900	876,300
Deming Creek		68,300	44,200		84,800	40,400	125,200	237,700
Gog Lake		348,100	5,700		13,500	18,300	31,800	385,600
Four Mile	105,900	139,100	10,000	1,600	5,500	46,900	52,400	309,000
Hay Creek		151,300	800		20,300	11,600	31,900	184,000
Horsefly		66,900	75,500		126,300	28,000	154,300	296,700
Merritt Cr.			17,300	400	113,800	12,400	126,200	143,900
Meryl Creek		90,800	55,600		320,900	46,200	367,100	513,500
Owens		124,700	19,300		167,300	15,100	182,400	326,400
Quartz Valley		16,300	7,200		239,800	32,700	272,500	296,000
Seab. Rock			115,500		8,400	23,700	32,100	147,600
Whitworth		147,900	6,100		11,600	16,400	28,000	182,000
<b>Totals</b>	<b>631,700</b>	<b>1,360,300</b>	<b>430,000</b>	<b>2,000</b>	<b>1,405,200</b>	<b>407,100</b>	<b>1,812,300</b>	<b>4,236,300</b>



TABLE NO.10  
PROJECT TOTALS

OWNERSHIP OF TIMBERED ACREAGE

Name of Owner	Area 1	Area 2	Area 3	Total
<b>United States:</b>				
Crater N.F.	8,480			8,480
Fremont N.F.		4,870	166,330	171,200
Klamath N.F.	1,430			1,430
Modoc N.F.			68,920	68,920
O.&.C. Land Grant	57,960			57,960
Klamath Indian Res.		252,920		252,920
Public Domain	7,110	28,020	61,210	96,340
<b>Total U.S.</b>	<b>74,980</b>	<b>285,810</b>	<b>296,460</b>	<b>657,250</b>
State	440	3,320	490	4,250
Association	195,820	80,680	166,940	443,440
Other Private Owners.	39,860	56,830	65,810	162,500
<b>Total Private</b>	<b>235,680</b>	<b>137,510</b>	<b>232,750</b>	<b>605,940</b>
<b>Total</b>	<b>311,100</b>	<b>426,640</b>	<b>529,700</b>	<b>1,267,440</b>

TABLE NO.11

PROJECT TOTALS

TIMBERED ACREAGE BY CHARACTER OF STAND

Timber Type	Area 1	Area 2	Area 3	Total
Sparse Yellow Pine	25,770	99,770	169,860	295,400
Pure Yellow Pine	165,290	223,290	265,160	653,740
Mixed Yellow Pine & Fir	91,570	83,910	71,030	246,510
Non Yellow Pine	28,470	19,670	23,650	71,790
Totals	311,100	426,640	529,700	1,267,440

TABLE NO.12  
PROJECT TOTALS  
YELLOW PINE VOLUMES BY OWNERSHIP

Name of Owner	Area 1	Area 2	Area 3	Total
<b>United States:</b>				
Crater N.F.	107,200			107,200
Fremont N.F.		29,600	1,360,300	1,389,900
Klamath N.F.	9,900			9,900
Modoc N.F.			631,700	631,700
O. & C. Grant land	493,600			493,600
Klamath Indian Res.		3,034,300		3,034,300
Public Domain	<sup>49,600</sup> <del>115,700</del>	244,400	430,000	<sup>724,000</sup> <del>790,100</del>
Total U.S.	<sup>660,300</sup> <del>726,400</del>	3,308,300	2,422,000	<sup>6,390,600</sup> <del>6,456,700</del>
State	<sup>3,200</sup> <del>4,100</del>	39,200	2,000	<sup>44,400</sup> <del>45,300</del>
Association	<sup>2,709,000</sup> <del>2,642,000</del>	873,900	1,405,200	<sup>4,988,100</sup> <del>4,921,100</del>
Other Private land	357,600	563,700	407,100	1,328,400
Total Private	<sup>3,066,600</sup> <del>2,999,600</del>	1,437,600	1,812,300	<sup>6,316,500</sup> <del>6,249,500</del>
<b>Totals</b>	<b>3,730,100</b>	<b>4,785,100</b>	<b>4,236,300</b>	<b>12,751,500</b>

PART II

DISTRIBUTION OF BEETLE LOSSES OF 1921



TABLE NO.13  
AREA 1  
NO. TREES KILLED AND VOLUME OF 1921 LOSS  
ACCORDING TO TYPE OF STAND

Name of Unit	: Sparse Yellow Pine		: Pure Yellow Pine		: Mixed Fir		: Totals	
	:No.trees:	Volume	:No.trees:	Volume	:No.trees:	Volume	:No.trees:	Volume
Aspen Lake			2,565	2,308,500	395	355,500	2,960	2,664,000
Big Bend	40	48,000	470	564,000	210	252,000	720	864,000
Chase Butte	350	350,000	400	400,000	640	640,000	1,390	1,390,000
Clover Sta.	70	70,000	5,360	5,360,000	2,005	2,005,000	7,435	7,435,000
Eagle Ridge	105	126,000	2,215	2,658,000	885	1,062,000	3,205	3,846,000
Jenny Creek	104	154,000	1,740	1,914,000	400	440,000	2,280	2,508,000
Johnson Prairie			1,165	1,631,000	660	924,000	1,825	2,555,000
Klamath Canyon	555	333,000	1,055	633,000	15	9,000	1,625	975,000
Pokkgama	475	665,000	3,280	4,592,000	845	1,183,000	4,600	6,440,000
Round Lake	340	306,000	1,750	1,575,000	320	288,000	2,410	2,169,000
Topsy	690	828,000	1,240	1,488,000	300	360,000	2,330	2,676,000
Worden	380	418,000	590	649,000	350	385,000	1,320	1,452,000
Totals	3,145	3,298,000	21,830	23,772,500	7,025	7,903,500	32,000	34,974,000

**TABLE NO.14**  
**AREA 1**  
**NUMBER OF YELLOW PINE TREES KILLED BY BEETLES-1921**  
**BY OWNERSHIP**

Name of Unit :	Erater	Klamath				Private		Total
	N.F.	N.F.	O.&.C.	Vacant	State	Assoe.	Invol.	
Aspen Lake	65					2,850	45	2,960
Big Bend			245			350	125	720
Chase Butte			160	40		630	560	1,390
Clover Sta.	410		600	10		5,570	845	7,435
Eagle Ridge				10		3,110	85	3,205
Jenny Creek	10		725	110		770	665	2,280
Johnson Prairie	50		370	10		825	570	1,825
Klamath Canyon		30	600	530		245	220	1,625
Pokegama		40	810	70		3,220	460	4,600
Round Lake					20	1,930	460	2,410
Topsy		50	495	40	20	455	1,170	2,230
Worden			60	20		700	540	1,320
Totals	535	120	4,065	840	40	20,655	5,745	32,000

TABLE NO.15  
AREA 1  
VOLUME OF BEETLE DAMAGE IN 1921  
BY OWNERSHIP

Name of Unit	Crater	Klamath				Private		
	N.F.	N.F.	O.&C.	Vacant	State	Assoc.	Invol.	Totals
Aspen Lake	58,500					2,565,000	40,000	2,664,000
Big Bend			294,000			420,000	150,000	864,000
Chase Butte			160,000	40,000		630,000	560,000	1,390,000
Glover Sta.	410,000		600,000	10,000		5,370,000	845,000	7,435,000
Hagle Ridge				12,000		3,732,000	102,000	3,846,000
Jenny Creek	11,000		797,500	121,000		847,000	731,500	2,508,000
Johnson Prairie	70,000		518,000	14,000		1,155,000	798,000	2,555,000
Klamath Canyon		18,000	360,000	318,000		147,000	132,000	975,000
Pokegama		56,000	1,134,000	98,000		4,508,000	644,000	6,440,000
Round Lake					18,000	1,737,000	414,000	2,169,000
Sopsy		60,000	594,000	48,000	24,000	546,000	1,404,000	2,676,000
Warden			66,000	22,000		770,000	594,000	1,452,000
Totals	549,500	134,000	4,523,500	683,000	42,000	22,627,000	6,415,000	34,974,000

Total Value  
at \$3 per M.

**TABLE NO.16**  
**AREA 1**  
**VALUE OF TREES KILLED IN 1921**  
**STUMPAGE VALUES FROM \$1.50 to \$5.00 per M.B.M.**

Unit Name	Crater N.F.	Klamath N.F.	O.&C.	Vacant	State	Private Assoe.	Invol.	Total
Aspen Lake	\$263					\$11,542	\$183	\$11,988
Big Bend			\$1,323			1,890	675	3,888
Chase Butte			560	\$140		2,205	1,960	4,865
Clover Sta.	1,845		2,700	45		25,065	3,803	33,458
Eagle Ridge				60		18,660	510	19,230
Jenny Creek	39		2,791	423		2,964	2,561	8,778
Johnson Prairie	245		1,813	49		4,042	2,793	8,942
Klamath Canyon		\$27	540	477		220	198	1,462
Pokegama		224	4,536	392		18,032	2,576	25,760
Round Lake					\$81	7,816	1,863	9,760
Topsy		210	2,079	168	84	1,911	4,914	9,366
Worden			231	77		2,695	2,079	5,082
Totals	\$2,392	\$461	\$16,573	\$1,831	\$165	\$97,042	\$24,116	\$142,579



**TABLE NO.17**  
**AREA 2**  
**NO. TREES KILLED AND VOLUME OF 1921 LOSS**  
**ACCORDING TO TYPE OF STAND**

Name of Unit	: Sparse: Yellow Pine :		: Pure Yellow Pine :		: Mixed Fir :		: Totals :	
	Trees	Volume	Trees	Volume	Trees	Volume	Trees	Volume
Algoma	400	320,000	360	288,000	10	8,000	770	616,000
Antelope	60	54,000	2,900	2,610,000	560	504,000	3,520	3,168,000
Black Hills	1,080	1,080,000	2,940	2,940,000	70	70,000	4,090	4,090,000
Big	440	440,000	1,890	1,890,000	600	600,000	2,930	2,930,000
Chiloquin	90	99,000	2,060	2,266,000	470	517,000	2,620	2,882,000
Ferguson	1,180	1,416,000	790	948,000	10	12,000	1,980	2,376,000
Gerber	80	72,000	120	108,000			200	180,000
Hoodlows	200	140,000	870	609,000	60	42,000	1,130	791,000
Hildebrand	700	700,000	1,900	1,900,000	10	10,000	2,610	2,610,000
Rock Canyon	340	476,000	920	1,288,000	30	42,000	1,290	1,806,000
Royston	200	160,000	2,250	1,800,000	310	248,000	2,760	2,208,000
Saddle Mt.	440	440,000	2,720	2,720,000	450	450,000	3,610	3,610,000
Shoner	690	621,000	890	801,000	10	9,000	1,590	1,431,000
Sprague	70	70,000	550	550,000	80	80,000	700	700,000
Squaw Flat	760	760,000	1,000	1,000,000	200	200,000	1,960	1,960,000
Swan	320	288,000	1,300	1,170,000	120	108,000	1,740	1,556,000
Sycan	170	187,000	2,030	2,233,000	140	154,000	2,340	2,574,000
Trout Creek	90	81,000	2,600	2,340,000	780	702,000	3,470	3,123,000
Whiskey Creek	300	270,000	2,310	2,079,000	260	234,000	2,870	2,583,000
Willow Flat	670	536,000	4,220	3,376,000	310	248,000	5,200	4,160,000
Yainax	360	396,000	1,670	1,837,000	90	99,000	2,120	2,332,000
Totals	8,640	8,606,000	36,290	34,753,000	4,570	4,337,000	49,500	47,696,000

TABLE NO. 18  
AREA 2  
NO. OF Y.P. TREES KILLED BY BEETLES IN 1921  
BY OWNERSHIP

Unit Name	K.I.R.	Fremont		Vacant	State	Private		Total	Totals
		N.F.				Assoc	Invol.		
Algoma				55		645	70	715	770
Antelope	1,790			110		1,305	315	1,620	3,520
Black Hills	4,020					35	35	70	4,090
Bly	2,795					75	60	135	2,930
Chiloquin	2,520					55	45	100	2,620
Ferguson	1,980								1,980
Gerber				70		70	60	130	200
Goodlewa		505		130		300	195	495	1,130
Hildebrand				405	100	615	1,490	2,105	2,610
Rocy Canyon				340	35	645	270	915	1,290
Royston				445	25	1,230	1,060	2,290	2,760
Saddle Mt.	3,430					90	90	180	3,610
Shoner				190	10	700	690	1,390	1,590
Sprague	600					20	80	100	700
Squaw Flat				220		1,090	650	1,740	1,960
Swan				105	100	1,090	445	1,535	1,740
Sycan	2,340								2,340
Trout Creek	3,295					60	115	175	3,470
Whiskey Cr.	2,380			5	10	240	235	475	2,870
Willow Flat				805	5	3,450	940	4,390	5,200
Yainax	1,665					230	225	455	2,120
<b>Totals</b>	<b>26,815</b>	<b>505</b>		<b>2,880</b>	<b>285</b>	<b>11,945</b>	<b>7,070</b>	<b>19,015</b>	<b>49,500</b>

**TABLE NO.19**  
**AREA 2**  
**VOLUME OF BEETLE DAMAGE IN 1921**  
**BY OWNERSHIP**

Unit Name	K.I.R.	Fremont N.F.	Vacant	State	Assec.	Invol.	Total
Algoma			45,600		516,000	54,400	616,000
Antelope	1,611,000		96,300		1,174,500	286,200	3,168,000
Black Hills	4,020,000				35,000	35,000	4,090,000
Bly	2,795,000				75,000	60,000	2,930,000
Chiloquin	2,772,000				60,500	49,500	2,882,000
Ferguson	2,376,000						2,376,000
Gerber			60,300		63,000	56,700	180,000
Seedlows		353,500	89,600		210,000	137,900	791,000
Hildebrand			408,000	97,000	615,000	1,490,000	2,610,000
Rock Canyon			473,200	49,000	903,000	380,800	1,806,000
Royston			357,600	18,400	984,000	848,000	2,208,000
Saddle Mt.	3,432,000				92,000	86,000	3,610,000
Shoner			173,700	9,000	625,500	622,800	1,431,000
Sprague	595,000				20,000	85,000	700,000
Squaw Flat			221,000		1,093,000	646,000	1,960,000
Swan			94,500	86,400	984,600	400,500	1,566,000
Sycan	2,574,000						2,574,000
Trout Creek	2,963,700				55,800	103,500	3,123,000
Whiskey Cr.	2,142,000		4,500	9,000	216,000	211,500	2,583,000
Willow Flat			644,000	4,000	2,760,000	752,000	7,160,000
Yainax	1,833,700				249,700	248,600	2,332,000
<b>Totals</b>	<b>27,114,400</b>	<b>353,500</b>	<b>2,668,300</b>	<b>272,800</b>	<b>10,732,600</b>	<b>6,554,400</b>	<b>47,696,000</b>



TABLE NO. 20  
AREA 2  
VALUE OF TREES KILLED IN 1921  
BY OWNERSHIP

Name of Unit	: K.I.R.	: Fremont	: N.F.	: Vacant	: State	: Private		: Total	: Totals
						: Assoc.	: Invol.		
Algoma				\$160		\$1,806	\$190	\$1,996	\$2,156
Antelope	\$5,638			\$338		4,110	1,002	5,112	11,088
Black Hills	12,060					105	105	210	12,270
Bly	9,782					262	211	473	10,255
Chiloquin	9,702					212	173	385	10,087
Ferguson	7,128								7,128
Gerber				151		157	142	299	450
Goodlewe		\$884		224		525	344	869	1,977
Hildebrand				1,428	\$339	2,153	5,215	7,368	9,135
Rock Canyon				1,420	147	2,709	1,142	3,851	5,418
Royston				894	46	2,460	2,120	4,580	5,520
Saddle Mt.	12,012					322	301	623	12,635
Shoner				608	31	2,189	2,180	4,369	5,008
Sprague	2,678					90	382	472	3,150
Squaw Flat				774		3,825	2,261	6,086	6,860
Swan				331	303	3,445	1,402	4,847	5,481
Sycan	6,435								6,435
Trout Creek	10,372					196	362	558	10,930
Whiskey Cr.	7,497			16	31	756	740	1,496	9,040
Willow Flat				2,254	14	9,660	2,632	12,292	14,560
Yainax	6,417					874	871	1,745	8,162
Totals	\$89,721	\$884	\$8,598	\$911	\$35,856	\$21,775	\$57,631	\$157,745	



**TABLE NO. 21**  
**AREA 3**  
**NO. TREES KILLED AND VOLUME OF 1921 LOSS**  
**ACCORDING TO TYPE OF STAND**

Name of Unit	Sparse Yellow		Pure Yellow Pine		Mixed Fir		Totals	
	Trees	Volume	Trees	Volume	Trees	Volume	Trees	Volume
Barnes Valley	810	645,400	1,040	834,400	200	160,000	2,050	1,640,000
Crowder Flat	1,100	1,220,000	6,600	7,250,000			7,700	8,470,000
Deming Creek	206	185,400	2,024	1,821,600	270	243,000	2,500	2,250,000
Dog Lake	790	790,000	2,080	2,080,000			2,870	2,870,000
Four Mile	257	257,000	1,583	1,583,000			1,840	1,840,000
Hay Creek	220	176,000	860	688,000	50	40,000	1,130	904,000
Horsefly	575	517,500	3,408	3,067,200	97	87,300	4,080	3,672,000
Merritt Cr.	150	135,000	350	315,000	320	288,000	820	738,000
Meryl Cr.	338	335,000	2,995	2,995,000	1,320	1,320,000	4,650	4,650,000
Owens	475	475,000	3,325	3,325,000	200	200,000	4,000	4,000,000
Quartz Valley	160	160,000	2,390	2,390,000	220	220,000	2,770	2,770,000
Scab Rock	910	819,000	330	297,000			1,240	1,116,000
Whitworth	260	234,000	1,500	1,350,000	590	531,000	2,350	2,115,000
<b>Totals</b>	<b>6,248</b>	<b>5,949,500</b>	<b>28,485</b>	<b>27,996,200</b>	<b>3,267</b>	<b>3,089,300</b>	<b>38,000</b>	<b>37,035,000</b>

**TABLE NO. 22**  
**AREA 3**  
**NO. OF YELLOW PINE TREES KILLED BY BEETLES IN 1921**  
**BY OWNERSHIP**

Name of Unit :	Modoc	Fremont	Vacant	State	Private		Total	Total
	N.F.	N.F.			Assoc.	Invol.		
Barnes Valley		1,325	240		320	165	485	2,050
Browder Flat	3,450		45		2,825	1,380	4,205	7,700
Deming Creek		1,010	270		640	580	1,220	2,500
Dog Lake		2,445	35	15	95	280	375	2,870
Four Mile	645	760	80	20	220	155	375	1,840
Hay Creek		950			115	75	190	1,130
Horsefly		640	480		1,975	985	2,960	4,080
Merritt Cr.		245	30		500	45	545	820
Meryl Creek		140	435		3,395	680	4,075	4,650
Dwens		1,440	50		2,000	510	2,510	4,000
Quartz Valley		100	70		2,160	440	2,600	2,770
Scab Rock			980		100	160	260	1,240
Whitworth		840	160		1,090	260	1,350	2,350
Totals	4,095	9,885	2,835	35	15,435	5,715	21,150	38,000

**TABLE NO.23**  
**AREA 3**  
**VOLUME OF YELLOW PINE KILLED BY BEETLES IN 1921**  
**BY OWNERSHIP**

Name of Unit	Modoc	Fremont	Vacant	State	Private		Totals
	N.F.	N.F.			Assoc.	Invol.	
Barnes Valley		1,060,000	192,000		256,000	132,000	1,640,000
Crowder Flat	3,795,000		49,500		3,107,500	1,518,000	8,470,000
Deming Creek		909,000	243,000		576,000	522,000	2,250,000
Dog Lake		2,445,000	35,000	15,000	95,000	280,000	2,870,000
Four Mile	645,000	760,000	40,000	20,000	220,000	155,000	1,840,000
Hay Creek		752,000			92,000	60,000	904,000
Horsefly		576,000	432,000		1,777,500	886,500	3,672,000
Merritt Cr.		220,500	27,000		450,000	40,500	738,000
Meryl Creek		140,000	435,000		3,395,000	680,000	4,650,000
Owens		1,440,000	50,000		2,000,000	510,000	4,000,000
Quartz Valley		100,000	70,000		2,160,000	440,000	2,770,000
Scab Rock			882,000		90,000	144,000	1,116,000
Whitworth		756,000	144,000		981,000	234,000	2,115,000
Totals	4,440,000	9,158,500	2,599,500	35,000	15,200,000	5,602,000	37,035,000

TABLE NO.24  
AREA 3  
VALUE OF LOSS DURING 1921  
BY OWNERSHIP

Unit Names	Modoc	Fremont	Vacant	State	Private		Total	Total
	N.F.	N.F.			Assoe.	Invol.		
Barnes Valley		\$2,650	\$480		\$640	\$330	\$970	\$4,100
Crowder Flat	\$11,385		149		9,322	4,554	13,876	25,410
Deming Creek		3,181	850		2,016	1,828	3,844	7,875
Dog Lake		6,112	87	39	237	700	937	7,175
Four Mile	1,613	1,900	100	50	550	387	937	4,600
Hay Creek		1,880			230	150	380	2,260
Horsefly		2,016	1,512		6,221	3,103	9,324	12,852
Merritt Cr.		661	81		1,350	122	1,472	2,214
Meryl		490	1,523		11,882	2,380	14,262	16,275
Owens		5,040	175		7,000	1,785	8,785	14,000
Quartz Valley		350	245		7,560	1,540	9,100	9,695
Scab Rock			2,205		225	360	585	2,790
Whitworth		2,646	504		3,433	819	4,252	7,402
Total	\$12,998	\$26,926	\$ 7,911	\$89	\$50,666	\$18,058	\$68,724	\$116,648



**TABLE NO. 25**  
**PROJECT TOTALS**  
**TREES AND VOLUMES OF 1921 BEETLE LOSS**  
**ACCORDING TO TYPE OF STAND**

Timber Type	Area 1		Area 2		Area 3		Totals	
	Trees	Volume	Trees	Volume	Trees	Volume	Trees	Volume
Sparse Yellow Pine	3,145	3,298,000	8,640	8,606,000	6,248	5,949,500	18,033	17,853,500
Pure Yellow Pine	21,830	23,772,500	36,290	34,753,000	28,485	27,996,200	86,605	86,521,700
Mixed Pine And Fir	7,025	7,903,500	4,570	4,337,000	3,267	3,089,300	14,862	15,329,800
<b>Totals</b>	<b>32,000</b>	<b>34,974,000</b>	<b>49,500</b>	<b>47,696,000</b>	<b>38,000</b>	<b>37,035,000</b>	<b>119,500</b>	<b>119,705,000</b>

TABLE NO. 26  
PROJECT TOTALS  
NO. YELLOW PINE TREES KILLED BY BEETLES IN 1921  
BY OWNERSHIP

Owner	Area 1	Area 2	Area 3	Totals
United States:				
Crater N.F.	535			535
Fremont N.F.		505	9,885	10,390
Klamath N.F.	120			120
Modoc N.F.			4,095	4,095
O. & C. Land Grant	4,065			4,065
Klamath Indian Res.		26,815		26,815
Public Domain	840	2,880	2,835	6,555
Total U.S.	5,560	30,200	16,815	52,575
State	40	285	35	360
Association	20,655	11,945	15,435	48,035
Other Private land	5,745	7,070	5,715	18,530
Total Private	26,400	19,015	21,150	66,565
Total	32,000.	49,500	38,000	119,500

TABLE NO.27  
PROJECT TOTALS  
VOLUME OF BEETLE DAMAGE IN 1921  
BY OWNERSHIP

Owner	Area 1	Area 2	Area 3	Totals
<b>United States:</b>				
Crater N.F.	549,500			549,500
Fremont N.F.		353,500	9,158,500	9,512,000
Klamath N.F.	134,000			134,000
Modoc N.F.			4,440,000	4,440,000
O.& C.land Grant	4,523,500			4,523,500
Klamath Indian Res.		27,114,400		27,114,400
Public Domain	683,000	2,668,300	2,599,500	5,950,800
<b>Total U.S.</b>	<b>5,890,000</b>	<b>30,136,200</b>	<b>16,198,000</b>	<b>52,224,200</b>
State	42,000	272,800	35,000	349,800
Association	22,627,000	10,732,600	15,200,000	48,559,600
Other Private lands	6,415,000	6,554,400	5,602,000	18,571,400
<b>Total Private</b>	<b>29,042,000</b>	<b>17,287,000</b>	<b>20,802,000</b>	<b>67,131,000</b>
<b>Totals</b>	<b>34,974,000</b>	<b>47,696,000</b>	<b>37,035,000</b>	<b>119,705,000</b>

TABLE NO.28  
PROJECT TOTALS  
VALUE OF TREES KILLED IN 1921  
BY OWNERSHIP

Owners	Area 1	Area 2	Area 3	
<b>United States:</b>				
Crater N.F.	\$2,392			\$2,392
Freemont N.F.		\$884	\$26,926	27,810
Klamath N.F.	461			461
Modoc N.F.			12,998	12,998
O. & C. Land Grant	16,573			16,573
Klamath Indian Res.		89,721		89,721
Public Domain	1,831	8,598	7,911	18,340
<b>Total U.S.</b>	<b>\$21,257</b>	<b>\$99,203</b>	<b>\$47,835</b>	<b>\$168,295</b>
State	165	911	89	1,165
Association	97,042	35,856	50,666	183,564
Other Private Owners	24,115	21,775	18,058	63,948
<b>Total Private</b>	<b>121,157</b>	<b>57,631</b>	<b>68,724</b>	<b>247,512</b>
<b>Total</b>	<b>\$142,579</b>	<b>\$157,745</b>	<b>\$116,648</b>	<b>\$416,972</b>



OWERS  
United  
States  
Insurance  
Company  
of  
New  
York  
City  
and  
County  
of  
New  
York  
Total  
Total

PART III

SUMMARY OF STATISTICS FOR LOSSES OF 1920, 1921, and 1922

TABLE NO.29  
AREA 1  
REVISED TABLE OF YELLOW PINE LOSSES FOR 1920

Name of Unit	: No.Trees:	Av. Vol:	Volume	: Stumpage :	Value of:	Percent :	Trees Killed Per Sec.	
	: Killed	: Per Tree:	Killed	: Value :	Loss :	Killed :	Av.	: Max
Aspen Lake	3,700	1,000	3,700,000	\$4.00	\$14,800	1.35	140	150
Gig Bend	1,035	1,100	1,138,500	4.00	4,554	1.65	90	90
Chase Butte	1,575	1,000	1,575,000	3.00	4,725	1.22	88	90
Glover Sta.	8,060	1,100	8,866,000	4.00	35,464	1.27	100	300
Eagle Ridge	3,400	900	3,060,000	4.50	13,770	1.57	121	200
Jenny Creek	2,000	1,200	2,400,000	3.00	7,200	.64	28	90
Johnson Prairie	1,965	1,400	2,751,000	3.00	8,253	.45	26	65
Klamath Canyon	1,845	700	1,291,500	1.50	1,937	2.19	105	160
Pokegama	4,840	1,400	6,776,000	3.50	23,716	.86	63	150
Round Lake	2,845	900	2,560,500	4.00	10,242	1.15	99	200
Topsy	2,285	1,000	2,285,000	3.00	6,855	.91	57	160
Worden	1,450	1,000	1,450,000	3.00	4,350	2.27	124	200
Totals	35,000	1,080	37,853,500	\$3.59	\$135,866	1.00%	72	300

TABLE NO.30  
AREA 2  
REVISED TABLE OF YELLOW PINE LOSSES FOR 1920

Name of Unit	: Trees : Killed	: Av. Vol. : : Per Tree:	Volume Killed	: Stumpage: : Value :	Value of Loss	: Percent : Killed :	: Trees Killed per Sec. : Av. : Max	
Algoma	1,160	800	928,000	\$3.00	\$2,784	2.14	87	260
Antelope	4,500	800	3,600,000	3.00	10,800	1.11	115	315
Black Hills	6,100	800	4,880,000	2.50	12,200	.92	106	250
Bly	4,100	900	3,690,000	3.00	11,070	1.40	94	200
Chiloquin	3,330	800	2,664,000	3.00	7,992	1.22	98	305
Ferguson	2,890	800	2,312,000	2.50	5,780	2.06	163	260
Gerber	180	900	162,000	2.00	324	.33	20	30
Goodlowe	820	700	574,000	2.00	1,148	.76	42	130
Hildebrand	2,590	900	2,331,000	3.00	6,993	1.36	97	200
Rock Canyon	1,350	1,000	1,350,000	2.50	3,335	.87	71	110
Royston	2,480	800	1,984,000	2.00	3,968	1.16	130	160
Saddle Mt.	3,820	1,000	3,820,000	3.00	11,460	.96	82	175
Shoner	2,210	600	1,326,000	3.00	3,978	1.26	115	280
Sprague	780	900	702,000	4.00	2,808	1.15	93	160
Squaw Flat	2,670	1,000	2,670,000	3.00	8,010	1.54	109	180
Swan	2,200	800	1,760,000	3.00	5,280	1.22	96	270
Sycan	1,950	1,100	2,145,000	2.00	4,290	.38	31	130
Trout Creek	3,970	700	2,779,000	3.00	8,337	.77	74	195
Whiskey Creek	2,800	700	1,960,000	3.00	5,880	.63	72	180
Willow Flat	5,620	700	3,934,000	3.00	11,802	1.02	110	300
Yainax	2,480	800	1,984,000	3.00	5,952	1.05	102	270
Totals	58,000	820	47,555,000	\$2.82	\$134,231	1.00%	87	315

TABLE NO.31  
AREA 3  
REVISED TABLE OF YELLOW PINE LOSSES FOR 1920

Unit Name	: Trees : Killed	: Av. Vel. : : per tree :	Volume : Killed	: Stumpage: : Value :	Value of : Loss	: Percent : Killed	: Trees killed per Sec. : Av. : Max	
Barnes Valley	1,780	800	1,424,000	\$2.00	\$2,848	.42	26	80
Crowder Flat	6,200	1,000	6,200,000	2.50	15,500	.71	44	100
Deming Cr.	3,640	900	3,276,000	3.00	9,828	1.37	70	200
Dog Lake	2,280	1,000	2,280,000	2.00	4,560	.59	28	60
Four Mile	1,600	1,000	1,600,000	2.00	3,200	.52	26	40
Hay Creek	800	900	640,000	2.00	1,280	.35	27	50
Horsefly	6,500	900	5,850,000	3.00	17,550	1.97	103	360
Merritt Cr.	780	900	702,000	2.50	1,755	.49	23	45
Meryl Creek	4,340	1,000	4,340,000	3.00	13,020	.84	43	140
Owens	5,400	1,000	5,400,000	3.00	16,200	1.65	90	300
Quartz Valley	2,780	1,000	2,780,000	3.00	8,340	.94	53	100
Seab Rock	1,200	900	1,080,000	2.00	2,160	.73	38	160
Whitworth	2,700	900	2,430,000	3.00	7,290	1.33	50	400
Totals	40,000	950	38,002,000	\$2.73	\$103,531	.90	48	400



TABLE NO. 32  
PROJECT TOTALS  
REVISED TABLE OF YELLOW PINE LOSSES FOR 1920

Item	Area 1	Area 2	Area 3	Totals
No. Trees Killed	35,000	58,000	40,000	133,000
Volume Killed	37,853,500	47,555,000	38,002,000	123,410,500
Value of Loss	\$135,866	\$134,231	\$103,531	\$373,628
Percent of Stand Killed	1.00%	1.00%	.90%	.97%
Av. No. Trees Killed per Sec.	72	87	48	67
Max. No. Trees Killed per Sec.	300	315	400	400
Av. Volume per Tree	1,080	820	950	930
Av. Stumpage Value per M.B.M.	\$ 3.59	\$2.82	\$2.73	\$3.03

TABLE NO.33  
AREA 1  
SUMMARY OF YELLOW PINE LOSSES FOR 1921

Name of Unit	No. Trees	Av. Vol.:	Volume	Stumpage :	Value	Percent :	Trees Killed per sec.	
	: Killed	: per tree:	: Killed	: Value :	: of Loss	: Killed :	Av.	Max
Aspen Lake	2,960	900	2,664,000	\$4.50	\$11,988	.98	112	200
Big Bend	720	1,200	864,000	4.50	3,888	1.25	63	85
Chase Butte	1,390	1,000	1,390,000	3.50	4,865	1.08	77	140
Clover Sta.	7,435	1,000	7,435,000	4.50	33,458	1.08	92	320
Eagle Ridge	3,205	1,200	3,846,000	5.00	19,230	1.98	115	300
Jenny Creek	2,280	1,100	2,508,000	3.50	8,778	.67	32	120
Johnson Prairie	1,825	1,400	2,555,000	3.50	8,942	.42	24	60
Klamath Canyon	1,625	600	975,000	1.50	1,462	1.66	92	235
Pokegama	4,600	1,400	6,440,000	4.00	25,760	.82	60	150
Round Lake	2,410	900	2,169,000	4.50	9,760	.97	84	320
Topsy	2,230	1,200	2,676,000	3.50	9,366	1.06	56	130
Werden	1,320	1,100	1,452,000	3.50	5,082	2.28	113	280
Totals	32,000	1,095	34,984,000	\$4.08	\$142,579	.93	66	320

TABLE 34  
Area 2  
SUMMARY OF YELLOW PINE LOSSES FOR 1921

Unit Name	: Trees : Killed	: Av. Vol.: : per tree:	Volume Killed	: Stumpage: : Value :	Value of: Loss	Percent : : of stand;	Trees Killed per Av.	Sec. : Max.
Algoma	770	800	616,000	\$3.50	\$2,156	1.42	58	100
Antelope	3,520	900	3,168,000	3.50	11,068	.97	90	250
Black Hills	4,090	1,000	4,090,000	3.00	12,270	.77	71	200
Bly	2,930	1,000	2,930,000	3.50	10,255	1.11	67	170
Chiloquin	2,620	1,100	2,882,000	3.50	10,087	1.32	77	180
Ferguson	1,980	1,200	2,376,000	3.00	7,128	2.12	112	200
Gerber	200	900	180,000	2.50	450	.60	22	35
Goodlowe	1,130	700	791,000	2.50	1,977	1.05	59	110
Hildebrand	2,610	1,000	2,610,000	3.50	9,135	1.52	98	220
Rock Canyon	1,290	1,400	1,806,000	3.00	5,418	1.17	68	160
Royston	2,760	800	2,208,000	2.50	5,520	1.29	145	200
Saddle Mt.	3,610	1,000	3,610,000	3.50	12,635	.91	59	180
Shoner	1,590	900	1,431,000	3.50	5,008	1.36	82	180
Sprague	700	1,000	700,000	4.50	3,150	1.15	83	160
Squaw Flat	1,960	1,000	1,960,000	3.50	6,869	1.13	80	160
Swan	1,740	900	1,566,000	3.50	5,481	1.09	76	130
Sycan	2,340	1,100	2,574,000	2.50	6,435	.49	37	140
Trout Cr.	3,470	900	3,123,000	3.50	10,930	.87	65	170
Whiskey Cr.	2,870	900	2,583,000	3.50	9,040	.83	73	250
Willow Flat	5,200	800	4,160,000	3.50	14,560	1.07	102	240
Yainax	2,120	1,100	2,332,000	3.50	8,162	1.24	86	160
Totals	49,500	965	47,696,000	\$3.31	\$157,745	1.00%	74	250

28,490

21,010

TABLE NO.35  
AREA 3  
SUMMARY OF YELLOW PINE LOSSES FOR 1921

Name of Unit	Trees	Av.Vol.:	Volume	Stumpage:	Value	Percent:	Trees killed per Secp	
	: Killed	:per tree:	: Killed	: Value :	: of Loss	: of stand:	Av.	Max
Barnes Valley	2,050	800	1,640,000	\$2.50	\$4,100	.61	30	60
Crowder Flat	7,700	1,100	8,470,000	3.00	25,410	.97	54	210
Deming Creek	2,500	900	2,250,000	3.50	7,875	.95	48	180
Dog Lake	2,870	1,000	2,870,000	2.50	7,175	.74	35	70
Four Mile	1,840	1,000	1,840,000	2.50	4,600	.60	30	50
Hay Creek	1,130	800	904,000	2.50	2,260	.49	38	60
Horsefly	4,080	900	3,672,000	3.50	12,852	1.24	65	250
Merritt Cr.	820	900	738,000	3.00	2,214	.51	24	80
Meryl Cr.	4,650	1,000	4,650,000	3.50	16,275	.90	46	180
Owens	4,000	1,000	4,000,000	3.50	14,000	1.22	67	285
Quartz Valley	2,770	1,000	2,770,000	3.50	9,695	.93	53	120
Seab Rock	1,240	900	1,116,000	2.50	2,790	.76	39	200
Whitworth	2,350	900	2,115,000	3.50	7,402	1.15	44	235
Totals	38,000	975	37,035,000	\$3.15	\$116,648	.87%	46	285



TABLE NO. 36  
PROJECT TOTALS  
SUMMARY OF YELLOW PINE LOSSES FOR 1921

Item	Area 1	Area 2	Area 3	Totals
No. of Trees Killed	32,000	49,500	38,000	119,500
Volume Killed	34,974,000	47,696,000	37,035,000	119,705,000
Value of Loss	\$142,579	\$157,745	\$116,648	\$416,972
Percent of Stand killed	.93%	1.00%	.87%	.94%
Av. No. Trees per Sec.	66	74	46	60
Max. No. Trees Killed per Sec.	320	250	285	320
Av. Vol Per Tree	1,095	965	975	1,000
Av. Stumpage Value per M.B. M.	\$4.08	\$3.31	\$3.15	\$3.49

TABLE NO. 37  
AREA 1  
SUMMARY OF YELLOW PINE LOSSES FOR 1922

Name of Unit	No. trees:	Av. Vol.:	Volume	Stumpage :	Value	Percent :	Trees killed per Sec.	
	: Killed	: per tree:	Killed	: Value :	: of Loss	: of Stand:	Av.	Max
Aspen Lake	1,745	1,100	1,919,500	\$5.00	\$9,597	.70	66	115
Big Bend	610	1,300	793,000	5.00	3,965	1.15	53	80
Chase Butte	925	1,000	925,000	4.00	3,700	.72	51	125
Clover Sta.	5,480	900	4,932,000	5.00	24,660	.71	68	210
Eagle Ridge	1,590	900	1,431,000	6.00	8,586	.74	57	120
Jenny Creek	2,455	1,100	2,700,500	4.00	10,802,	.72	34	100
Johnson Prairie	1,600	1,200	1,920,000	4.00	7,680	.32	21	65
Klamath Canyon	1,460	600	876,000	2.00	1,752	1.48	83	175
Kekegama	4,500	1,500	6,750,000	4.50	30,375	.86	58	220
Round Lake	1,245	1,000	1,245,000	5.00	6,225	.56	43	105
Topsy	1,570	1,100	1,727,000	4.00	6,908	.68	40	110
Worden	820	1,000	820,000	4.00	3,280	1.28	70	150
Totals	24,000	1,085	26,039,000	\$4.52	\$117,530	.70%	50	220

TABLE NO.38  
AREA 2  
SUMMARY OF YELLOW PINE LOSSES FOR 1922

Name of Unit	Trees	Av.Vol.	Volume	Stumpage:	Value	Percent	Trees killed per Sec.	
	: Killed	: per tree:	: Killed	: Value :	: of Loss	: of stand:	Av.	Max
Algoma	360	1,100	396,000	\$4.00	\$1,584	.91	27	60
Antelope	2,020	1,000	2,020,000	4.00	8,080	.62	52	145
Black Hills	3,050	1,000	3,050,000	3.50	10,675	.57	53	120
Bly	2,200	1,100	2,420,000	4.00	9,680	.92	50	115
Chiloquin	940	1,200	1,128,000	4.00	4,512	.51	28	70
Ferguson	1,200	1,000	1,200,000	3.50	4,200	1.07	68	125
Gerber	260	1,000	260,000	3.00	780	.86	29	75
Goodlowe	1,100	700	770,000	3.00	2,310	1.02	57	100
Hildebrand	2,080	1,000	2,080,000	4.00	8,320	1.22	78	130
Rock Canyon	2,130	1,200	2,556,000	3.50	8,946	1.65	112	225
Royston	2,380	800	1,904,000	3.00	5,712	1.11	125	160
Saddle Mt.	2,850	1,300	3,705,000	4.00	14,820	.93	46	155
Shoner	800	900	720,000	4.00	2,880	.68	41	105
Sprague	450	1,400	630,000	5.00	3,150	1.03	54	100
Squaw Flat	1,260	1,100	1,386,000	4.00	5,544	.80	51	130
Swan	1,150	1,000	1,150,000	4.00	4,620	.80	50	90
Sycan	2,740	1,100	3,014,000	3.00	9,042	.54	44	130
Trout Cr.	3,330	1,100	3,663,000	4.00	14,652	1.02	62	225
Whiskey Cr.	3,020	1,000	3,020,000	4.00	12,080	.97	77	150
Willow Flat	3,610	1,000	3,610,000	4.00	14,440	.93	71	140
Yainax	1,770	1,100	1,947,000	4.00	7,788	1.03	72	120
Totals-	38,700	1,050	40,629,000	\$3.80	\$153,815	.85	58	225

TABLE NO.39  
AREA 3  
SUMMARY OF YELLOW PINE LOSSES FOR 1922

Unit names	:Trees :Killed	:Av.Vol. : :per tree:	Volume Killed	:Stumpage : : Value :	Value of Loss	:Percent : :of stand:	<u>Trees killed per Sec.</u> Av. : Max	
Barnes Valley	2,350	800	1,880,000	\$2.50	\$4,700	.56	35	75
Crowder Flat	8,130	1,200	9,756,000	3.00	29,268	1.11	57	320
Deming Creek	2,250	1,000	2,250,000	4.00	9,000	.95	43	165
Dog Lake	3,200	1,000	3,200,000	2.50	8,000	.83	38	110
Four Mile	2,000	1,100	2,200,000	2.50	5,500	.71	33	70
Hay Creek	1,170	900	1,053,000	2.50	2,632	.57	39	85
Horsefly	3,150	900	2,835,000	4.00	11,340	.95	50	200
Merritt Cr.	930	900	837,000	3.00	2,511	.58	27	90
Meryl Creek	5,100	1,100	5,610,000	4.00	22,440	1.09	51	185
Owens	2,500	1,000	2,500,000	4.00	10,000	.76	42	110
Quartz Valley	2,730	1,100	3,003,000	4.00	12,012	1.01	52	100
Scab Rock	1,320	1,000	1,320,000	2.50	3,300	.90	42	200
Whitworth,	2,070	900	1,863,000	4.00	7,452	1.02	39	180
Totals	37,000	1,035	38,307,000	\$3.35	\$128,155	.90	45	320



TABLE NO.40  
PROJECT TOTALS  
SUMMARY OF YELLOW PINE LOSSES FOR 1922

Items	: Area 1	: Area 2	: Area 3	: Totals
No. of Trees Killed	24,000	38,700	37,000	99,700
Volume Killed	26,039,000	40,629,000	38,307,000	104,975,000
Value of Loss	\$117,530	\$153,815	\$128,155	\$399,500
Percent of Stand Killed	.70%	.85%	.90%	.82%
Av. No. Trees per Sec.	50	58	45	50
Max.No.Trees killed per Sec.	220	225	320	320
Av. Volume per tree.	1,085	1,050	1,035	1,050
Av. Value per M.B.M.	\$4.52	\$3.80	\$3.35	\$3.81

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### PROGRESS OF CONTROL WORK

TABLE NO. 41  
SPRING CONTROL OF 1922  
(TREATING OVERWINTERING GENERATIONS OF 1921)

Area :	Unit	Camp : : No.	Operating : : Period	Trees : : Treated	Volume : : Treated	Acreage : : Covered	Cost	:Av. Vol. : : per tree	:Av. No. trees : : treated-Sec.
I	Round Lake	11	Apr. 19-May 29	794	678,930	6,720	\$4,039.00	855	75
	Aspen Lake	12	May 7-June 7	1,064	929,140	9,290	4,168.00	870	74
	Eagle Ridge	13	May 15- " 9	882	1,532,410	4,200	2,361.00	1,740	134
	" "	14	" 22- " 17	544	318,170	6,240	1,915.30	585	56
Total Area 1				3,284	3,458,650	26,450	\$12,483.30	1,050	79.5
2	Algoma	21	Apr. 18-May 15	243	194,020	3,480	2,107.00	800	45
	Swan	21	May 15-June "	448	443,810	3,980	2,218.00	990	72
	"	23	" 11- " 10	409	323,460	5,200	2,317.07	790	50
	Shoner	22	" 8- " 17	819	746,790	9,980	3,180.00	910	53
Total Area 2				1,919	1,708,080	22,640	\$9,822.07	890	54.2
3	Owens	31	May 2-June 7	568	727,380	6,680	3,540.00	1,280	54
	"	33	" 23- " 21	465	319,950	6,100	2,796.62	690	49
	Horsefly	32	" 10- " 15	728	677,950	9,600	3,660.00	930	49
Total Area 3				1,761	1,725,280	22,380	\$9,996.62	980	50.4
Project Totals				6,964	6,892,010	71,470	\$32,301.99	990	62.4

TABLE NO.42  
SUMMER CONTROL OF 1922  
(TREATING SUMMER GENERATION OF 1922)

Area :	Unit :	Camp : No. :	Operating : Period :	Trees : treated:	Volume : Treated	Acreage : Covered	Cost :	Av.Vol. : per tree:	Av.Trees : treated-Sec.
1	Eagle Ridge	14	July 13-Aug.26	72	103,560	1,681	\$1,150.17	1,440	27.4
2	Antelope	21	July 1-Sept.25	167	201,000	2,560	\$1,961.16	1,200	42
	Algoma	22	July 1-July 15	8	8,840	2,400	246.00	1,100	2
Total Area 2				175	209,844	4,960	\$2,207.16	1,200	22.6
3	Horsefly	32	July 1-Sept.30	371	342,850	10,500	\$3,145.00	920	23
	Owens	33	July 1-Sept.16	160	248,300	6,940	1,438.21	1,550	15
Total Area 3				531	591,150	17,440	\$3,583.21	1,100	19.5
Total for Project				778	904,550	24,081	\$6,940.54	1,160	20.7



TABLE NO.43  
FALL AND WINTER CONTROL OF 1922  
(TREATING OVERWINTERING GENERATION OF 1922)

Area :	Unit :	Camp : No. :	Operating : Period :	Trees : Treated :	Volume : Treated :	Acreage : Covered :	Cost :	:Av.Vol. : :per tree:	:Av.No.trees : :treated per Sec
I	Aspen Lake	15	Oct.28-Dec.16	536	574,020	4,727	\$2,476.81	1,070	72
	Clover St.	15	Jan.1-Mar.10/23	<u>713</u>	<u>1,020,950</u>	<u>5,400</u>	<u>3,552.53</u>	1,430	84
Total Area I				1,249	1,594,970	10,127	\$6,029.34	1,280	78
2	Antelope	24	Sept.28-Nov.23	714	764,690	11,469	4,460.89	1,070	40
	Saddle Mt.	25	Nov.3-Dec.6	<u>562</u>	<u>754,030</u>	<u>6,960</u>	<u>1,903.00</u>	1,340	51
Total Area 2				1,276	1,518,720	18,429	\$6,363.89	1,190	44
3	Crowder Flat	34	Sept.29-Dec.5	1,433	1,878,790	17,600	\$5,502.96	1,310	52
	Horsefly	35	Oct.1-Nov.16	<u>462</u>	<u>419,700</u>	<u>7,840</u>	<u>1,660.00</u>	890	38
Total Area 3				1,895	2,298,490	25,440	\$7,162.96	1,210	48
Project Total				4,420	5,412,180	53,996	\$19,556.19	1,220	52

TABLE NO.44  
SPRING CONTROL WORK OF 1923  
(TREATING OVERWINTERING GENERATION 1922)

Area :	Unit	:Camp :	Operating	:Trees :	Volume	:Acreage :	Cost	: Av.Vol. :	:Av.No.Trees
:	:	: No. :	Period	:Treated :	Treated	:Covered :		:per tree :	:treated-See
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I	Clover Sta.	16	Mar.10-June 2	1,575	1,796,990	12,320	\$5,300.00	1,140	82
	Jenny Creek	"	Apr.24-May 12	383	441,650	6,062	1,300.00	1,150	40
	Round Lake	"	May 16-May 28	101	129,080	520	377.00	1,280	124
	Chase Butte	17	Mar.24-Apr.14	171	197,330	2,080	578.00	1,150	53
	Big Bend	"	Apr.2- Apr.11	102	146,360	1,400	427.00	1,430	47
	Pokegama	"	" 14-May 12	718	1,128,570	7,730	3,310.09	1,570	60
Total Area 1				2,950	3,839,980	30,112	\$11,292.09	1,300	63
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2	Sprague	26	Apr.12-Apr.28	162	261,420	2,080	780.00	1,610	50
	Saddle Mt.	"	Mar.25-May 2	468	676,130	6,400	2,025.00	1,440	47
	Saddle Mt.	27	May 23-May 31	101	141,700	1,800	570.00	1,400	36
	Trout Creek	26	May 3- June 9	738	945,570	4,400	2,843.00	1,280	108
	"	27	Apr.25-May 23	466	508,050	6,040	2,050.00	1,190	50
	"	28	May 6-June 16	776	825,410	5,240	2,025.00	1,060	95
	Chiloquin	27	Apr.2-Apr.24	284	361,870	5,080	1,458.00	1,270	36
	Squaw Flat	28	Apr.13-May 5	445	530,630	6,373	1,295.49	1,190	45
	Antelope	29	June 6-June 15	75	118,600	800	204.68	1,580	60
Total Area 2				3,515	4,368,580	38,213	\$13,251.17	1,240	59
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3	Meryl Creek	36	Mar.26-May 19	1,443	1,582,580	15,775	5,143.91	1,100	59
	Deming Creek	37	Apr.14-May 26	1,058	984,050	10,960	3,640.00	930	62
	Whitworth	"	May 26-June 2	437	406,340	4,000	1,510.00	930	70
Total Area 3				2,938	2,972,970	30,735	\$10,293.91	1,010	61
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Project Total Spring Work				9,403	11,181,530	99,060	34,837.17	1,190	61

